

(FILE 'HOME' ENTERED AT 14:07:58 ON 01 AUG 2008)

FILE 'HCAPLUS' ENTERED AT 14:08:25 ON 01 AUG 2008

L1	1359388	SEA ABB=ON	PLU=ON	GERMANIUM OR GE OR SI OR SILICON OR DIAMOND
L2	8848	SEA ABB=ON	PLU=ON	L1 (4A) (CAPILLAR### OR TUBE OR TUBULAR OR TUBING OR PIPE OR PIPING OR CONDUIT OR DUCT OR TUNNEL OR PASSAGE### OR HOSE OR COLUMN##)
L3	31885	SEA ABB=ON	PLU=ON	MALDI OR LASER (3A) (IONI? OR SPRAY)
L4	243735	SEA ABB=ON	PLU=ON	MASS (W) SPECTROMETR## OR ELECTROSPRAY OR ELECTRO (W) SPRAY
L5	652274	SEA ABB=ON	PLU=ON	IONI?
L6	5	SEA ABB=ON	PLU=ON	L2 AND L3
L7	93	SEA ABB=ON	PLU=ON	L2 AND L4
L8	28	SEA ABB=ON	PLU=ON	L7 AND L5
L9	24	SEA ABB=ON	PLU=ON	L8 NOT L6
L10	0	SEA ABB=ON	PLU=ON	L9 AND LASER
L11	9	SEA ABB=ON	PLU=ON	L9 AND CAPILLARY

\*\*\* It is now 8/1/2008 1:29:25 PM \*\*\*

[File 347] JAPIO Dec 1976-2007/Dec(Updated 080328)

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Set	Items	Description
S1	363290	S GERMANIUM? ? OR GE OR SI OR SILICON? ? OR DIAMOND? ?
S2	409	S MALDI? ? OR LASER? ? (3N) (IONIZ?????? OR SPRAY? ?)
S3	1498	S MASS () SPECTROMETR?? OR ELECTROSPRAY? ? OR ELECTRO () SPRAY? ?
S4	26550	S IONI?
S5	875017	S CAPILLAR??? OR TUBE? ? OR TUBULAR?? OR TUBING? ? OR PIPE? ? OR PIPING OR CONDUIT? ? OR CHANNEL? ? MICROCHANNEL? ? AND DUCT? ? OR TUNNEL???? OR PASSAGE? OR HOSE? ?
S6	2020	S S1 (4N) S5
S7	17	S S6 AND S2:S4
S8	40510	S S5 (3N) (MATERIAL? ? OR COMPOS?????? OR ELEMENT? ?)
S9	0	S S2 AND S8
S10	232	S S8 AND S3:S4
S11	37	S S3 AND S8
S12	36	S S11 NOT PY>2004

Set	Items	Description
S1	430	S (GERMANIUM? ? OR GE OR SI OR SILICON? ? OR DIAMOND? ?) (4N) COLUMN??
S2	409	S MALDI? ? OR LASER? ? (3N) (IONIZ?????? OR SPRAY? ?)
S3	1498	S MASS () SPECTROMETR?? OR ELECTROSPRAY? ? OR ELECTRO () SPRAY? ?
S4	0	S S1 AND S2:S3
S5	2	S S1 AND IONI?

[File 2] INSPEC 1898-2008/Jun W5

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[File 6] NTIS 1964-2008/Aug W2

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[File 8] Ei Compendex(R) 1884-2008/Jul W2

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[File 34] SciSearch(R) Cited Ref Sci 1990-2008/Jul W4

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[File 35] Dissertation Abs Online 1861-2008/Jan

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[File 57] Electronics & Communications Abstracts 1966-2008/Jul

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[File 99] Wilson Appl. Sci & Tech Abs 1983-2008/Jun

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[File 103] Energy SciTec 1974-2008/Jul B2

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[File 144] Pascal 1973-2008/Jul W4

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[File 239] Mathsci 1940-2008/Aug

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[File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec

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[File 23] CSA Technology Research Database 1963-2008/Jun

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Set	Items	Description
S1	3453575	S GERMANIUM? ? OR GE OR SI OR SILICON? ? OR DIAMOND? ?
S2	3338547	S CAPILLAR??? OR TUBE? ? OR TUBULAR?? OR TUBING? ? OR PIPE? ? OR PIPING OR CONDUIT? ? OR CHANNEL? ? MICROCHANNEL? ? AND DUCT? ? OR TUNNEL???? OR PASSAGE? OR HOSE? ?
S3	36952	S S1 (4N) S2
S4	69679	S MALDI? ? OR LASER? ? (3N) (IONIZ?????? OR SPRAY? ?)
S5	498167	S MASS ( ) SPECTROMETR?? OR ELECTROSPRAY? ? OR ELECTRO ( ) SPRAY? ?
S6	1637434	S IONI?
S7	38	S S3 AND S4
S8	29	RD (unique items)
S9	15	S S8 NOT PY>2004
S10	362	S S3 AND S5
S11	50541	S S4/TI,AB
S12	2802035	S S1/TI,AB
S13	2802585	S S2/TI,AB
S14	21587	S S12 (4N) S13
S15	366521	S S5/TI,AB
S16	124	S S14 AND S15
S17	64	RD (unique items)
S18	17	S S17 AND S6
S19	14	S S18 NOT S9
S20	4058	S S1 (4N) COLUMN??
S21	7	S S20 AND S11
S22	3	RD (unique items)

7/19/6 [Links](#)

Fulltext available through: [Order File History](#)

JAPIO

04699509 \*\*Image available\*\*

SUPERCRITICAL FLUID CHROMATOGRAPH

Pub. No.: 07-020109 [JP 7020109 A ]

Published: January 24, 1995 (19950124)

Inventor: ARAMATA MIKIO

SAITO KENJI

Applicant: SHIN ETSU CHEM CO LTD [000206] (A Japanese Company or Corporation), JP (Japan)

Application No.: 05-187472 [JP 93187472]

Filed: June 30, 1993 (19930630)

International Class: [ 6 ] G01N-030/02; G01N-030/84

JAPIO Class: 46.2 (INSTRUMENTATION -- Testing); 13.1 (INORGANIC CHEMISTRY -- Processing Operations)

#### ABSTRACT

**PURPOSE:** To restrain the deposition of nonvolatile components in a restrictor as low as possible by thermally decomposing the nonvolatile components in a sample.

**CONSTITUTION:** Carbon dioxide gas from a cylinder 6 is compressed by a pump 8 over a critical pressure and fed through a filter 12 into an oven unit A which produces a supercritical fluid being introduced to a column 2. On the other hand, a material to be analyzed is sampled by an injector 14 and introduced to the column 2 where the components thereof are separated. The supercritical fluid flows from the column 2 into a restrictor 4 while accompanying the separated components and then introduced to a hydrogen flame ionization detecting section 3. In this regard, the restrictor 4 is inserted into a silicon tube located in the center of a thermal decomposition furnace 15 thus thermally decomposing the nonvolatile components in the sample in real time. Since the nonvolatile components can be entirely introduced to the detecting section 3, deposition thereof at the outlet of restrictor 4 can be prevented.

7/19/7 [Links](#)

Fulltext available through: [Order File History](#)

JAPIO

04358240 **\*\*Image available\*\***

DEVICE FOR COATING INSIDE WALL OF FURNACE CORE PIPE

Pub. No.: 06-002140 [JP 6002140 A ]

Published: January 11, 1994 (19940111)

Inventor: HAYANO HIDEAKI

Applicant: NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)

Application No.: 04-165179 [JP 92165179]

Filed: June 24, 1992 (19920624)

International Class: [ 5 ] C23C-016/32; C23C-016/50

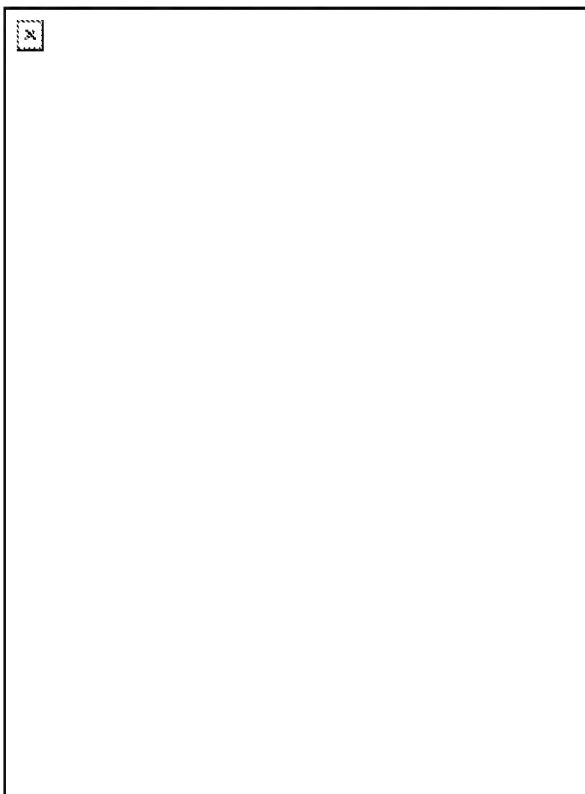
JAPIO Class: 12.6 (METALS -- Surface Treatment)

JAPIO Keyword: R004 (PLASMA); R020 (VACUUM TECHNIQUES)

Journal: Section: C, Section No. 1188, Vol. 18, No. 201, Pg. 118, April 08, 1994 (19940408)

**PURPOSE:** To minimize impurities concentrated in a silicon carbide by providing a gas supply mechanism part and a plasma reaction mechanism part, carbonizing silicon in the inside wall of a silicon furnace core pipe by plasma reaction under low temperature and low pressure and suppressing the intrusion of impurities and thermal diffusion of impurities.

**CONSTITUTION:** A reactant gas ( $\text{CH}(\text{sub } 4)$ ,  $\text{H}(\text{sub } 2)$ ) is supplied to the silicon furnace core pipe 8 in the plasma reaction mechanism part C from gas sources 1, 2 in the reaction gas supply mechanism part A. A silicon carbide furnace core pipe is formed by carbonizing silicon by sputtering the ionized gas with plasma reaction to the inside wall of the furnace core pipe 8. In this way, silicon is carbonized at a low temperature and a low pressure and the inside wall of the furnace core pipe is coated with high purity silicon carbide.



12/19/1 [Links](#)

Fulltext available through: [Order File History](#)

JAPIO

08204709 \*\*Image available\*\*

VERY THIN CAPILLARY FOR NANO-SPRAY IONIZATION FOR MASS SPECTROMETRIC ANALYSIS

Pub. No.: 2004-317469 [JP 2004317469 A ]

Published: November 11, 2004 (20041111)

Inventor: YAMADA NAOYUKI

SAYAMA YUKIHIRO

ANDO TOSHIHIKO

AOKI MASAYOSHI

SUZUKI EIICHIRO

HIRAYAMA KAZUO

Applicant: AJINOMOTO CO INC

EISYO METAL CO LTD

Application No.: 2003-141177 [JP 2003141177]

Filed: April 10, 2003 (20030410)

International Class: G01N-027/62; H01J-049/10; G01N-030/02; G01N-030/08; G01N-030/48; G01N-030/72; G01N-030/88

## ABSTRACT

**PROBLEM TO BE SOLVED:** To provide a very thin capillary for nano-spray ionization including a very thin capillary for nano-electronic-spray ionization for mass spectrometric analysis excellent in physical strength, durability and ionization stability, capable of ionizing stably a sample at a low flow rate, and manufactured stably.

**SOLUTION:** In this very thin capillary for nano-spray ionization for the mass spectrometric analysis having structure wherein an inner tube having  $50\mu\text{m}$  or less of inside diameter comprising a conductive material of metal or a conductive ceramic is coated with an outer tube comprising a material of metal or a conductive ceramic, the inner tube has a shape wherein a taper is provided in an outer wall of one end, and wherein a tip of the taper has  $10\mu\text{m}$  or more of upper end face. In each of the very thin capillary wherein the taper is provided in the outer wall of the one end of the inner tube, and wherein the taper tip forms a tip with the taper and an inside diametric wall, and the very thin capillaries of three embodiments (not shown), a tip of the outer tube is fixed in a point where the taper provided in the outer wall of the inner tube reaches an inner tube diameter, or in a sample-flowing-directional upstream point compared with the point.

19/9/14 (Item 3 from file: 144) [Links](#)

Fulltext available through: [STIC Full Text Retrieval Options](#)

Pascal

12298971 PASCAL No.: 95-0532263

Stereospecific dehydrogenation of (25R)- and (25S)-3 alpha ,7 alpha ,12 alpha -Trihydroxy-5 beta -cholestanoic acids by acyl-CoA oxidase in rat liver light mitochondrial fraction

IKEGAWA S; WATANABE H; GOTO T; MANO N; GOTO J; NAMBARA T

Tohoku univ., fac. pharmaceutical sci., Aobayama, Sendai 980, Japan

Journal: Biological & pharmaceutical bulletin

, 1995, 18 (8

) 1041-1044

ISSN: 0918-6158 Availability: INIST-18096;

354000054872520030

No. of Refs.: 20 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: Japan

Language: English

From a stereochemical point of view, the dehydrogenation mechanism of the biotransformation of 3 alpha ,7 alpha ,12 alpha -trihydroxy-5 beta -cholestanoic acid (THCA) into (24E)-3 alpha ,7 alpha ,12 alpha -trihydroxy-5 beta -cholest-24-enoic acid ( DELTA SUP 2 SUP 4 -THCA) has been studied with capillary gas chromatography (GC)/negative ion chemical ionization (NICI)-mass spectrometry. After incubation of (24R,25R)- or (24S,25S)-(24,25- SUP 2 H SUB 2 )THCA, synthesized from (24E)- DELTA SUP 2 SUP 4 -THCA by a deuterated diimide reduction, with a rat liver light mitochondrial fraction, 5 beta -cholestanoic acids were extracted and derivatized into a pentafluorobenzyl (PFB) ester-dimethylethylsilyl (DMES) ether. Subsequent resolution into THCA and DELTA SUP 2 SUP 4 -THCA was attained by GC on a cross-linked 5% phenylmethyl silicone fused-silica capillary column monitored with a corresponding characteristic carboxylate anion (M-PFB) SUP - in the NICI mode. The stereospecific elimination of a pro-R hydrogen at C-24 in both (25R)- and (25S)-THCA indicated syn-elimination for the former, whereas anti-elimination for the latter was observed.

English Descriptors: Bile acid; Dehydrogenation; Stereospecificity;

Enzymatic activity; Acyl-CoA oxidase; Liver; Rat; Mitochondria;

Biosynthesis

Broad Descriptors: Oxidoreductases; Enzyme; Rodentia; Mammalia; Vertebrata;

Oxidoreductases; Enzyme; Rodentia; Mammalia; Vertebrata; Oxidoreductases;

Enzima; Rodentia; Mammalia; Vertebrata

French Descriptors: Acide biliaire; Deshydrogenation; Stereospecificite;

Activite enzymatique; Acyl-CoA oxidase; Foie; Rat; Mitochondrie;

22/9/3 (Item 1 from file: 99) [Links](#)

Fulltext available through: [STIC Full Text Retrieval Options](#)

Wilson Appl. Sci & Tech Abs

2295667 H.W. Wilson Record Number: BAST01027896

"Matchsticks" for MALDI

Kling, Jim ;

Analytical Chemistry v. 73 no7 (Apr. 1 2001) p. 186A

Document Type: Feature Article ISSN: 0003-2700 Language: English Record Status: Corrected or revised record

Abstract: In the March 15 issue, Cuiffi and colleagues described a novel silicon surface for housing analytes for MALDI MS. The researchers utilized a plasma-enhanced chemical vapor deposition strategy to generate a thin film of rodlike silicon columns on a glass or plastic substrate and, under specific conditions, obtained uniform clusters. As shields for analytes against the harshness of ionization conditions, these silicon clusters should provide consistent ionization yields, more reproducible spectra, and an automation friendly approach to MALDI. Furthermore, the silicon films are readily fabricated and have properties that can be easily manipulated.

Descriptors: MALDI spectrometry; Silicon ;